



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/618,839
Source: O/PE
Date Processed by STIC: 9/25/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/618,839

DATE: 07/25/2003
TIME: 07:58:42

Input Set : A:\PTO.YF.txt
Output Set: N:\CRF4\07252003\J618839.raw

3 <110> APPLICANT: Lambeth, J. David
4 Cheng, Guangjie
5 McCoy, James
7 <120> TITLE OF INVENTION: Methods and Transgenic Mouse Model for Identifying and
Modulating Factors
8 Involved in the Production of Reactive Oxygen Intermediates
10 <130> FILE REFERENCE: 05501-0211 (43150-286808)
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/618,839
C--> 12 <141> CURRENT FILING DATE: 2003-07-14
12 <150> PRIOR APPLICATION NUMBER: US 60/395,498
13 <151> PRIOR FILING DATE: 2002-07-12
15 <160> NUMBER OF SEQ ID NOS: 19
17 <170> SOFTWARE: PatentIn version 3.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 2609
21 <212> TYPE: DNA
22 <213> ORGANISM: Homo sapiens
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26 <222> LOCATION: (207)..(1901)
27 <223> OTHER INFORMATION:
30 <220> FEATURE:
31 <221> NAME/KEY: misc_feature
32 <222> LOCATION: (2025)..(2025) ✓
33 <223> OTHER INFORMATION: "n" = any nucleotide
W--> 36 <220>
37 <221> NAME/KEY: misc_feature
38 <222> LOCATION: (2036)..(2036) ✓
39 <223> OTHER INFORMATION: "n" = any nucleotide
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43 <221> NAME/KEY: misc_feature
44 <222> LOCATION: (2164)..(2164) ✓
45 <223> OTHER INFORMATION: "n" = any nucleotide
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50 <222> LOCATION: (2264)..(2264) ✓
51 <223> OTHER INFORMATION: "n" = any nucleotide
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59 atgttccatt cctgaaggac ctctccagaa tccggattgc tgaatcttcc ctgttgctca 180
61 gaagggtctcc aaaccacctc ttgaca atg gga aac tgg gtg gtt aac cac tgg 233
62 Met Gly Asn Trp Val Val Asn His Trp
63 1 5

Does Not Comply
Corrected Diskette Needed

P.4

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PATENT APPLICATION: US/10/618,839

DATE: 07/25/2003
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Input Set : A:\PTO.YF.txt
Output Set: N:\CRF4\07252003\J618839.raw

65 ttt tca gtt ttg ttt ctg gtt tgg tta ggg ctg aat gtt ttc ctg	281
66 Phe Ser Val Leu Phe Leu Val Val Trp Leu Gly Leu Asn Val Phe Leu	
67 10 15 20 25	
69 ttt gtg gat gcc ttc ctg aaa tat gag aag gcc gac aaa tac tac tac	329
70 Phe Val Asp Ala Phe Leu Lys Tyr Glu Lys Ala Asp Lys Tyr Tyr Tyr	
71 30 35 40	
73 aca aga aaa atc ctt ggg tca aca ttg gcc tgt gcc cga gcg tct gct	377
74 Thr Arg Lys Ile Leu Gly Ser Thr Leu Ala Cys Ala Arg Ala Ser Ala	
75 45 50 55	
77 ctc tgc ttg aat ttt aac acg acg ctg atc ctg ctt cct gtg tgt cgc	425
78 Leu Cys Leu Asn Phe Asn Ser Thr Leu Ile Leu Leu Pro Val Cys Arg	
79 60 65 70	
81 aat ctg ctg tcc ttc ctg agg ggc acc tgc tca ttt tgc agc cgc aca	473
82 Asn Leu Leu Ser Phe Leu Arg Gly Thr Cys Ser Phe Cys Ser Arg Thr	
83 75 80 85	
85 ctg aga aag caa ttg gat cac aac ctc acc ttc cac aag ctg gtg gcc	521
86 Leu Arg Lys Gln Leu Asp His Asn Leu Thr Phe His Lys Leu Val Ala	
87 90 95 100 105	
89 tat atg atc tgc cta cat aca gct att cac atc att gca cac ctg ttt	569
90 Tyr Met Ile Cys Leu His Thr Ala Ile His Ile Ala His Leu Phe	
91 110 115 120	
93 aac ttt gac tgc tat agc aga agc cga cag gcc aca gat ggc tcc ctt	617
94 Asn Phe Asp Cys Tyr Ser Arg Ser Arg Gln Ala Thr Asp Gly Ser Leu	
95 125 130 135	
97 gcc tcc att ctc tcc agc cta tct cat gat gag aaa aag ggg ggt tct	665
98 Ala Ser Ile Leu Ser Ser Leu Ser His Asp Glu Lys Lys Gly Gly Ser	
99 140 145 150	
101 tgg cta aat ccc atc cag tcc cga aac acg aca gtg gag tat gtg aca	713
102 Trp Leu Asn Pro Ile Gln Ser Arg Asn Thr Thr Val Glu Tyr Val Thr	
103 155 160 165	
105 ttc acc agc gtt ggt ctc act gga gtg atc atg aca ata gcc ttg	761
106 Phe Thr Ser Val Ala Gly Leu Thr Gly Val Ile Met Thr Ile Ala Leu	
107 170 175 180 185	
109 att ctc atg gta act tca gct act gag ttc atc cgg agg agt tat ttt	809
110 Ile Leu Met Val Thr Ser Ala Thr Glu Phe Ile Arg Arg Ser Tyr Phe	
111 190 195 200	
113 gaa gtc ttc tgg tat act cac cac ctt ttt atc ttc tat atc ctt ggc	857
114 Glu Val Phe Trp Tyr Thr His His Leu Phe Ile Phe Tyr Ile Leu Gly	
115 205 210 215	
117 tta ggg att cac ggc att ggt gga att gtc cgg ggt caa aca gag gag	905
118 Leu Gly Ile His Gly Ile Gly Gly Ile Val Arg Gly Gln Thr Glu Glu	
119 220 225 230	
121 agc atg aat gag agt cat cct cgc aag tgt gca gag tct ttt gag atg	953
122 Ser Met Asn Glu Ser His Pro Arg Lys Cys Ala Glu Ser Phe Glu Met	
123 235 240 245	
125 tgg gat gat cgt gac tcc cac tgt agg cgc cct aag ttt gaa ggg cat	1001
126 Trp Asp Asp Arg Asp Ser His Cys Arg Arg Pro Lys Phe Glu Gly His	
127 250 255 260 265	
129 ccc cct gag tct tgg aag tgg atc ctt gca ccg gtc att ctt tat atc	1049

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Input Set : A:\PTO.YF.txt
Output Set: N:\CRF4\07252003\J618839.raw

130 Pro Pro Glu Ser Trp Lys Trp Ile Leu Ala Pro Val Ile Leu Tyr Ile			
131 270 275 280			
133 tgt gaa agg atc ctc cgg ttt tac cgc tcc cag cag aag gtt gtt att	1097		
134 Cys Glu Arg Ile Leu Arg Phe Tyr Arg Ser Gln Gln Lys Val Val Ile			
135 285 290 295			
137 acc aag gtt gtt atg cac cca tcc aaa gtt ttg gaa ttg cag atg aac	1145		
138 Thr Lys Val Val Met His Pro Ser Lys Val Leu Glu Leu Gln Met Asn			
139 300 305 310			
141 aag cgt ggc ttc agc atg gaa gtt ggg cag tat atc ttt gtt aat tgc	1193		
142 Lys Arg Gly Phe Ser Met Glu Val Gly Gln Tyr Ile Phe Val Asn Cys			
143 315 320 325			
145 ccc tca atc tct ctc ctg gaa tgg cat cct ttt act ttg acc tct gct	1241		
146 Pro Ser Ile Ser Leu Leu Glu Trp His Pro Phe Thr Leu Thr Ser Ala			
147 330 335 340 345			
149 cca gag gaa gat ttc ttc tcc att cat atc cga gca gca ggg gac tgg	1289		
150 Pro Glu Glu Asp Phe Phe Ser Ile His Ile Arg Ala Ala Gly Asp Trp			
151 350 355 360			
153 aca gaa aat ctc ata agg gct ttc gaa caa caa tat tca cca att ccc	1337		
154 Thr Glu Asn Leu Ile Arg Ala Phe Glu Gln Gln Tyr Ser Pro Ile Pro			
155 365 370 375			
157 agg att gaa gtg gat ggt ccc ttt ggc aca gcc agt gag gat gtt ttc	1385		
158 Arg Ile Glu Val Asp Gly Pro Phe Gly Thr Ala Ser Glu Asp Val Phe			
159 380 385 390			
161 cag tat gaa gtg gct gtg ctg gtt gga gca gga att ggg gtc acc ccc	1433		
162 Gln Tyr Glu Val Ala Val Leu Val Gly Ala Gly Ile Gly Val Thr Pro			
163 395 400 405			
165 ttt gct tct atc ttg aaa tcc atc tgg tac aaa ttc cag tgt gca gac	1481		
166 Phe Ala Ser Ile Leu Lys Ser Ile Trp Tyr Lys Phe Gln Cys Ala Asp			
167 410 415 420 425			
169 cac aac ctc aaa aca aaa aag atc tat ttc tac tgg atc tgc agg gag	1529		
170 His Asn Leu Lys Thr Lys Ile Tyr Phe Tyr Trp Ile Cys Arg Glu			
171 430 435 440			
173 aca ggt gcc ttt tcc tgg ttc aac aac ctg ttg act tcc ctg gaa cag	1577		
174 Thr Gly Ala Phe Ser Trp Phe Asn Asn Leu Leu Thr Ser Leu Glu Gln			
175 445 450 455			
177 gag atg gag gaa tta ggc aaa gtt ggt ttt cta aac tac cgt ctc ttc	1625		
178 Glu Met Glu Glu Leu Gly Lys Val Gly Phe Leu Asn Tyr Arg Leu Phe			
179 460 465 470			
181 ctc acc gga tgg gac agc aat att gtt ggt cat gca gca tta aac ttt	1673		
182 Leu Thr Gly Trp Asp Ser Asn Ile Val Gly His Ala Ala Leu Asn Phe			
183 475 480 485			
185 gac aag gcc act gac atc gtt aca ggt ctg aaa cag aaa acc tcc ttt	1721		
186 Asp Lys Ala Thr Asp Ile Val Thr Gly Leu Lys Gln Lys Thr Ser Phe			
187 490 495 500 505			
189 ggg aga cca atg tgg gac aat gag ttt tct aca ata gct acc tcc cac	1769		
190 Gly Arg Pro Met Trp Asp Asn Glu Phe Ser Thr Ile Ala Thr Ser His			
191 510 515 520			
193 ccc aag tct gta gtg gga gtt ttc tta tgt ggc cct cgg act ttg gca	1817		
194 Pro Lys Ser Val Val Gly Val Phe Leu Cys Gly Pro Arg Thr Leu Ala			

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Input Set : A:\PTO.YF.txt
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195	525	530	535	
197	aag agc ctg cgc aaa tgc tgt cac cga tat tcc agt ctg gat cct aga			1865
198	Lys Ser Leu Arg Lys Cys Cys His Arg Tyr Ser Ser Leu Asp Pro Arg			
199	540	545	550	
201	aag gtt caa ttc tac ttc aac aaa gaa aat ttt tga gttataggaa			1911
202	Lys Val Gln Phe Tyr Phe Asn Lys Glu Asn Phe			
203	555	560		
205	taaggacggt aatctgcatt ttgtctctt gtatcttcag taatttagttt ataggaataa			1971
W--> 207	gacggtaat ctgcattttg tctctttgtatcttcagtaa ttacttggt ctcntcaggt			2031
209	ttgancagtc actttaggat aagaatgtgc ctctcaagcc ttgactccct ggtattctt			2091
211	ttttgattgc attcaacttc gttacttgag cttcagcaac ttaagaacctt ctgaagtct			2151
213	taaagttctg aanttcttaa agcccatgga tccttctca gaaaaataaac tgtaaatctt			2211
215	tctggacagc catgactgta gcaaggctt atagcagaag tttgggtgggt canaattata			2271
217	caactaatcc caggtgattt tatcaattcc agtgttacca ttccttgagt tttggtttgt			2331
219	aatctttgt ccctcccacc cccacagaag attttaagta gggtgacttt taaaataaaa			2391
221	atttattgaa taattaatga taaaacataa taataaaacat aaataataaaa caaaattacc			2451
223	gagaacccca tccccatata acaccaacag tgtacatgtt tactgtcact tttgatatgg			2511
225	tttatccagt gtgaacagca atttattttt tttgctcattc aaaaaataaaa ggatttttt			2571
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262	20 25 30			
265	Tyr Glu Lys Ala Asp Lys Tyr Tyr Thr Arg Lys Ile Leu Gly Ser			
266	35 40 45			
269	Thr Leu Ala Cys Ala Arg Ala Ser Ala Leu Cys Leu Asn Phe Asn Ser			
270	50 55 60			
273	Thr Leu Ile Leu Leu Pro Val Cys Arg Asn Leu Leu Ser Phe Leu Arg			

These do not apply to
this sequence. Only
564 residues in this
sequence, it is also
a peptide sequence

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Input Set : A:\PTO.YF.txt
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274	65	70	75	80													
277	Gly	Thr	Cys	Ser	Phe	Cys	Ser	Arg	Thr	Leu	Arg	Lys	Gln	Leu	Asp	His	
278					85					90						95	
281	Asn	Leu	Thr	Phe	His	Lys	Leu	Val	Ala	Tyr	Met	Ile	Cys	Leu	His	Thr	
282								100			105					110	
285	Ala	Ile	His	Ile	Ile	Ala	His	Leu	Phe	Asn	Phe	Asp	Cys	Tyr	Ser	Arg	
286									115		120					125	
289	Ser	Arg	Gln	Ala	Thr	Asp	Gly	Ser	Leu	Ala	Ser	Ile	Leu	Ser	Ser	Leu	
290									130		135					140	
293	Ser	His	Asp	Glu	Lys	Lys	Gly	Gly	Ser	Trp	Leu	Asn	Pro	Ile	Gln	Ser	
294	145					150					155					160	
297	Arg	Asn	Thr	Thr	Val	Glu	Tyr	Val	Thr	Phe	Thr	Ser	Val	Ala	Gly	Leu	
298							165			170						175	
301	Thr	Gly	Val	Ile	Met	Thr	Ile	Ala	Leu	Ile	Leu	Met	Val	Thr	Ser	Ala	
302							180			185						190	
305	Thr	Glu	Phe	Ile	Arg	Arg	Ser	Tyr	Phe	Glu	Val	Phe	Trp	Tyr	Thr	His	
306							195			200						205	
309	His	Leu	Phe	Ile	Phe	Tyr	Ile	Leu	Gly	Leu	Gly	Ile	His	Gly	Ile	Gly	
310							210			215						220	
313	Gly	Ile	Val	Arg	Gly	Gln	Thr	Glu	Glu	Ser	Met	Asn	Glu	Ser	His	Pro	
314	225						225			230			235			240	
317	Arg	Lys	Cys	Ala	Glu	Ser	Phe	Glu	Met	Trp	Asp	Asp	Arg	Asp	Ser	His	
318									245			250				255	
321	Cys	Arg	Arg	Pro	Lys	Phe	Glu	Gly	His	Pro	Pro	Glu	Ser	Trp	Lys	Trp	
322							260			265						270	
325	Ile	Leu	Ala	Pro	Val	Ile	Leu	Tyr	Ile	Cys	Glu	Arg	Ile	Leu	Arg	Phe	
326							275			280						285	
329	Tyr	Arg	Ser	Gln	Gln	Lys	Val	Val	Ile	Thr	Lys	Val	Val	Met	His	Pro	
330							290			295						300	
333	Ser	Lys	Val	Leu	Glu	Leu	Gln	Met	Asn	Lys	Arg	Gly	Phe	Ser	Met	Glu	
334	305							305			310			315			320
337	Val	Gly	Gln	Tyr	Ile	Phe	Val	Asn	Cys	Pro	Ser	Ile	Ser	Leu	Leu	Glu	
338							325			330						335	
341	Trp	His	Pro	Phe	Thr	Leu	Thr	Ser	Ala	Pro	Glu	Glu	Asp	Phe	Phe	Ser	
342							340			345						350	
345	Ile	His	Ile	Arg	Ala	Ala	Gly	Asp	Trp	Thr	Glu	Asn	Leu	Ile	Arg	Ala	
346							355			360						365	
349	Phe	Glu	Gln	Gln	Tyr	Ser	Pro	Ile	Pro	Arg	Ile	Glu	Val	Asp	Gly	Pro	
350							370			375						380	
353	Phe	Gly	Thr	Ala	Ser	Glu	Asp	Val	Phe	Gln	Tyr	Glu	Val	Ala	Val	Leu	
354	385							385			390			395			400
357	Val	Gly	Ala	Gly	Ile	Gly	Val	Thr	Pro	Phe	Ala	Ser	Ile	Leu	Lys	Ser	
358							405			410						415	
361	Ile	Trp	Tyr	Lys	Phe	Gln	Cys	Ala	Asp	His	Asn	Leu	Lys	Thr	Lys	Lys	
362							420			425						430	
365	Ile	Tyr	Phe	Tyr	Trp	Ile	Cys	Arg	Glu	Thr	Gly	Ala	Phe	Ser	Trp	Phe	
366							435			440						445	
369	Asn	Asn	Leu	Leu	Thr	Ser	Leu	Glu	Gln	Glu	Met	Glu	Glu	Leu	Gly	Lys	
370							450			455						460	

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/618,839

DATE: 07/25/2003
TIME: 07:58:43

Input Set : A:\PTO.YF.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 2025,2036,2164,2264

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 7

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/618,839

DATE: 07/25/2003
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Input Set : A:\PTO.YF.txt
Output Set: N:\CRF4\07252003\J618839.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:36 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:27
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1971
M:341 Repeated in SeqNo=1
L:412 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:409
L:734 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:731
L:1056 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:1053
L:1388 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:1385
L:1714 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:1711
L:2570 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:2567